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Partners In Progress

EPA Update on Federal Facility Cleanup and Reuse

Reuse Roundup

Across the country, EPA's Federal Facilities Program is helping transform former federal installations into commercial, residential, recreational, and ecological properties while ensuring protection of public health and the environment. This issue of Partners in Progress highlights five sites that demonstrate the value of former federal installations after military activities and weapons production cease, and communities take advantage of reuse opportunities.

Rocky Flats, Colorado

For almost 40 years, Rocky Flats was one of the prime nuclear weapons production sites in the United States. The Department of Energy manufactured weapons components from plutonium, uranium, and beryllium beginning in 1952 and ending in 1989, when safety concerns led to suspension of operations at the facility.

Now, after more than a decade of cleanup efforts, the 6,300-acre site in Colorado is set to become a National Wildlife Refuge. Once EPA and Colorado state regulators evaluate and approve completion of the cleanup, Rocky Flats will be transferred to the U.S. Fish and Wildlife Service (FWS). Situated 16 miles northwest of downtown Denver, the site includes prairie, wetland, and upland shrub habitats and is home to many rare or threatened species, such as Preble's meadow jumping mouse and xeric tallgrasses. The National Wildlife Refuge will offer 12.8 miles of multi-use trails, 3.8 miles of hiking-only trails, a visitor contact station, interpretive overlooks, viewing blinds, as well as environmental education and scientific research opportunities.

Rocky Flats, before and after cleanup.

The Department of Energy has addressed contamination of soil, ground water, and more than 800 structures, including manufacturing facilities, guard towers, and storage tanks. Much of the cleanup effort focused on the 385 acres known as the "Industrial Area" where most of the weapons manufacturing took place and where plutonium, uranium, and americium contamination persists. Modern technology expedited decontamination (see Partners in Progress Issue 8, November 2003), and physical cleanup was completed in October 2005 – a year ahead of schedule and $500 million under budget. A comprehensive risk assessment is ongoing and expected to be completed in the first half of 2006.

Rocky Mountain Arsenal, Colorado

Activities at Rocky Mountain Arsenal in Commerce City, Colorado, have evolved from chemical weapons production in 1942 to prairie grass restoration in 2005. During World War II, the former Army installation manufactured chemical weapons and munitions. Portions of the 17,000-acre site

<Continued on Page 2>

www.epa.gov/fedfac
EPA505-B-05-001
Issue 9 November 2005

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<Continued From Page 1>

Rocky Mountain Arsenal's Lake Mary

were subsequently leased to a private company for agricultural pesticide production until 1982. Waste disposal methods, acceptable at the time, resulted in significant soil and ground water contamination. Remediation included the installation of several ground water treatment systems and innovative landfill covers to prevent contaminant transport. A significant portion of the site has been deemed safe for ecological reuse, and in 2004, approximately 5,000 acres were transferred to FWS for establishment of a National Wildlife Refuge. An additional 900 acres were sold to Commerce City for development.

Commerce City created plans for "Prairie Gateway" on the 900 acres now owned by the city. Site plans include a visitor center for the refuge, Commerce City's new Civic Center, a professional soccer stadium, and other commercial and recreational development. FWS will manage its 5,000-acre parcel, and 10,000 additional acres will be transferred upon completion of cleanup in 2012. The FWS land will operate as Rocky Mountain Arsenal National Wildlife Refuge—the largest urban refuge in the country. Just 10 miles northeast of downtown Denver, the site is home to more than 330 species, including bald eagles, coyotes, deer, and white pelicans. FWS will conduct ecosystem restoration to revitalize native prairie habitat and will implement a biomonitoring program to detect potential impacts of contamination and cleanup on representative species. Community benefits include 9 miles of trails for wildlife observation and photography, a visitor center, public tours, and environmental education programs. Accessible platforms will allow visitors to participate in catch and release fishing for popular trophy-size bluegill, catfish, northern pike, and largemouth bass.

Lowry Air Force Base, Colorado

What was once an aircraft hangar is now an ice rink. What was once a steam plant is now a luxury apartment building. Transformations at Lowry Air Force Base have been dramatic and have profoundly benefited the communities of Denver and Aurora, Colorado. Redevelopment at the site generated $4 billion between 1994 and 2003 from taxes, fees, tourism, and commercial/residential development, among other renewal efforts.

Military operations at Lowry ceased in 1994. The base served as a training ground for most of its history, but also was the site of the first Titan I ICBM silos in the 1950s and housed an undergraduate space program in the 1980s. Cleanup began in the 1990s to address contamination issues such as landfills, asbestos, ground water pollution, and unexploded munitions. Special efforts to recycle demolition waste from buildings and runways resulted in 600,000 tons of cement being reused in 23 miles of new roads.

New homes at Lowry Air Force Base

After the base was transferred to the Lowry Redevelopment Authority, some parcels were redeveloped, and new residents moved into newly constructed homes as early as 1998. Now, Lowry boasts more than 6,000 residents, a large library, medical center, ice arena, the "Wings Over the Rockies" museum, two community colleges, and 800 acres of public parkland. The community continues to monitor and manage environmental hazards, and has won numerous awards for sustainable development and smart growth.

Lowry Town Center

Watertown, Massachusetts

Military history in Watertown, Massachusetts, can be traced back to 1816 when President James Madison established the Watertown Arsenal, later known as the Army Materials Technology Laboratory (AMTL). Originally charged with the storage, cleaning, and issuance of small

Watertown Arsenal Day Care Center

arms, military activity at the site progressed to ammunition production, weapons testing, and even nuclear research, with the completion of the Army's first material nuclear test reactor in 1960.

Located approximately five miles west of Boston, the site was added to EPA's Superfund National Priority List in 1994 due in large part to its proximity to the Charles River and the residential community. The base officially closed in 1995. Cleanup, which involved the decommissioning of the nuclear test reactor under Nuclear Regulatory Commission oversight, the removal of the underground tanks, and soil excavation, prepared 36.5 acres for transfer back to Watertown in 1998. (Fifty-nine acres of the Arsenal had been purchased by the local community in 1968 for use as retail, residential, park, and office space.) The Army also conducted investigations into public heath hazards from underground storage tanks. In September 2005, Watertown Arsenal achieved "site construction completion," an EPA designation that means all physical cleanup activities have been completed.

An office and manufacturing center on the Commander's Quarters Parcel has attracted tenants such as Harvard Business School Publishing Corporation, Arthur D. Little, and Bright Horizons Corporate Headquarters, and created approximately 2,000 new jobs for the area. Redevelopment has also included athletic fields, an ice rink, childcare facilities, restaurants, retail, and walking and bike trails. Great care was taken to preserve the historic architecture of the brick buildings while modernizing them with features such as fiber optic cable for Internet access.

Watertown Arsenal Commander's mansion

Fort Devens, Massachusetts

When Fort Devens was established in 1917, nobody envisioned that the temporary training ground for soldiers destined for World War I would remain a part of U.S. military infrastructure for the next 79 years. Prior to closure, the installation—just 35 miles west of Boston—served as a training facility and home to generations of soldiers. Now, thanks to a successful cleanup, transfer, and redevelopment process, Fort Devens is serving as a home to a host of new civilian residents and businesses.

To date, some 76 businesses have moved into 4,400 redeveloped acres of the original 9,280 acre installation, thanks to quick permitting processes, tax incentives, and other business-friendly provisions. These businesses now employ approximately 3,600 people, some of whom live in housing developed on the Devens property.

The Red Tail Golf Course on the Fort Devens site

Residents of Devens now enjoy downtown services and onsite childcare, as well as a hotel and conference center, and the 18-hole Red Tail Golf Club. The new Devens School District has been established to serve the community's students. In addition to these amenities, residents can also enjoy the site's 2,100 acres of open space and quick access to the surrounding communities of Ayers, Harvard, and Shirley. Residential development at the site is ongoing.

After the closure of Fort Devens in 1996, the Department of Defense, under EPA oversight, undertook extensive remediation activities to address contamination from hazardous materials attributed to the site's extensive military history. These activities included the construction of a consolidated landfill, removal of contaminated soil, the installation of a ground water treatment and monitoring system, and remediation of a number of fueling stations for both ground vehicles and aircraft.

BRAC Commission Recommendations Sent to Congress

On September 15, 2005, the President approved the Base Realignment and Closure (BRAC) Commission's recommended actions for 2005 and forwarded them to Congress for subsequent review. Congress has a period of 45 legislative days from that date to review the commission's recommended actions, and if no action is taken by the Congress within the 45 day time period the recommendations become binding on the Department of Defense (DoD) to implement.

The BRAC process was designed to aid in military readiness by assessing the military's needs and restructuring the base system as necessary by closing bases no longer needed and modifying the purpose and personnel of other installations. Previous rounds of BRAC were conducted in 1988, 1991, 1993, and 1995.

The 2005 BRAC recommendation affects some 72 facilities currently listed on the National Priorities List (NPL). Of these facilities, six are slated for closure and 33 will be realigned with a net loss in personnel. Another 33 facilities will see net gains in personnel as a result of BRAC recommendations. Sites are listed on the NPL because they pose a threat of actual or potential exposures to hazardous substances, pollutants, or contaminants that can harm human health and/or the environment. At federal facilities listed on the NPL, EPA is responsible for negotiating cleanup agreements at facilities; overseeing investigation and response activities, including jointly selecting the cleanup remedies; reviewing and commenting on remedies in the Five-Year Review reports; and preparing documents for deleting certain parcels or entire areas of land off the NPL.

Designation of NPL sites on the BRAC 2005 list—whether they are designated for closure or realignment—does not alter their status on the NPL. DoD facilities whose functions may change as a result of a BRAC action remain subject to environmental cleanup sufficient to reduce risks to human health and the environment. Where DoD wants to dispose of excess property, cleanup activities must be completed on the property prior to transfer or, in certain cases, portions of properties undergoing cleanup may be transferred to communities prior to cleanup completion. In those instances, however, these transferred parcels remain subject to cleanup activity until a suitable standard is reached, and may be restricted in their use.

Following cleanup and transfer, these former federal facilities may become the property of state or local governments, tribes, or private industry, and reused for purposes that benefit their surrounding communities, such as wildlife preserves, residential housing, business, and parkland.

Recommended BRAC Closures of NPL Sites

- Brunswick Naval Air Station
- Lone Star Army Ammunition Plant
- Malony U.S. Army Reserve Center (on Fort Devens)
- Riverbank Army Ammunition Plant
- Umatilla Army Depot
- Willow Grove Naval Air Station

Federal Facilities
Restoration and Reuse Office